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Osseous Tumors.

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Diseases of the Mouth—*Continued.*

Tumors of the maxillary bones, like tumors of other bones, and like tumors of the soft parts, are benign and malignant, analogous and heterologous.

The maxillary bones, because of this great vascularity and exposure to sources of irritation, are, perhaps, more disposed to enter on pathological conditions than any other of the ossa coporea.

Malignant tumors of these bones are only local exhibitions of a pre-existing cachexia—diathesis determines diseased action, the result of local injury.

The principal source of irritation to the maxillary bones is found in diseased teeth.

Tumors of these bones, which may, with most assurance, be looked upon as benign; are, the Encysted, the Common Inflammatory, and the Exostosis.

Those, the character of which may be esteemed doubtful, if not always malignant, are: the Osteosarcoma (fibro-plastic,) Osteo-cephaloma, Osteo-carcinoma, Osteo-melanosis, and Osteo-cancer.

Distinctive diagnostic signs, marking differences between benign and malignant growths, are only appreciable, if indeed appreciable at all, to the very experienced.

Certain general features, however, associate with the two lesions, which may be studied with much advantage.

Benign tumors are mostly referable to a cause, and are apt to be in proportion to that cause.

They are circumscribed by healthy structure. Lymph in a greater or lesser state of organization, infiltrates the neighboring tissue, marking the line of demarkation.

They do not seem to have other than the most innocent relation with adjoining organs, so far as disturbance to function is concerned.

The removal of the cause is apt to remove the effect.

In structure, benign tumors are homologous. They represent the structure of the body to which they are allied. They do not entirely defy constitutional treatment, but are more or less amenable to it.

They are scarcely any other than a single formative capacity.

Malignant tumors are, on the contrary, not at all in proportion to a cause which may be considered the provocative.

They are not healthly circumscribed, but their elementary structures is most apt to be found "infiltrated, inserted, or diffused, in the interspaces and cavities of the tissues in which they lie."

They are associated with a cachexia, which is not unfequently more marked than the local disorder. Thus, the vis vitæ is not unfrequently so prostrated, that the patient dies outright from the systemic depression. A patient afflicted with cancer has a color, which has not inaptly been likened to a cold buckwheat cake. A cancerous tumor will be found to have affected, markedly, all glands, the vessels running into which have association with it.

The removal of any supposed cause, or the removal of a cancerous tumor itself, will not effect a cure.

In structure, these growths are heterologous; for even if it be contended that, microscopically, their minute histology implies only arrestation of normal development; yet, I think, comparison cannot be carried to the varying character of the primary granules, then, (if my pathology

is not too old,) are not common to any growth, except the malignant.

True cancer seems not amenable to any constitutional treatment; there are the best of reasons for judging, that all reports of cases cured have origin in mistaken diagnosis.

Malignant tumors have—through the cachexia—a varying formative capacity, they multiply and propagate themselves; if one is removed, a second comes to take its place; either appearing in the site of removal, or in some other locality.

Benign Osteoids—Cystic Tumor of Paget.—From Paget, through most surgical writers, mention is made of a slow growing tumor of the jaw, a distinctive pathognomic feature of which, is a parchment-like crackle given on pressure. These tumors are described as cystic, and are the result of a pouching out, and consequent attenuation of the outer lamina of the bone.

I suppose I have treated, altogether, six or eight of these cases; but I have to offer, the singular experience, of not having met one of these cysts, which I could make crackle under pressure, or any other manipulation. Depending on this so insisted upon sign, I will recall the trouble and annoyance, and I may add the mortification my first case gave me.

These tumors, as I know them, are slow of growth, being, perhaps, a year in gaining the size of a common hickory nut.* They are, to the touch, as unyielding as the exostoses. The gum covering them is as healthy and natural looking as that in any part of the mouth. Sections of them not unfrequently exhibit septi of bone, which have supported the vault of the tumor, and which, of course, when existing, would prevent any yielding.

Case — Mrs. C——, aged about twenty-one, applied to me, some two years back, for treatment of a tumor occupyiug the canine fossa of the left superior maxillary bone. The growth had been eighteen months in progress; was about the size of a half walnut, perfectly solid to the touch, painless, and entirely healthy looking; the greatest disquietude of the patient being mental, her mother having died from scirrhus of the rectum.

Associated by marriage, and otherwise, with the family of this lady, are some ten or twelve physicians; each of whom had, in turn, examined the tumor without coming to any satisfactory conclusion concerning it. I am not able now to recall, exactly, how this patient happened to come under my care, but, at any rate, having previously met with two or three precisely similar cases, I felt justified in pronouncing the disease a common cystic tumor; the solidity of which was, not unlikely, attributable to the existence of the septi alluded to.

A choice of operations was suggested to this lady; either, that the cyst should be cut from the body of the bone, or that a crucial incision should be made in it, and the cavity being stuffed with medicated lint, thus obliterated.

Two or three weeks being spent in consultation with friends, the patient was finally submitted to my care, the latter operation being the one decided on.

The crucial incisions were made; several delicate septi of bone, which the cuts discovered, were broken up, the cyst was injected for the first three days with weak stimulating liquors. No inflammation developing, tufts of cotton, were saturated with tinct. of iodine, and the cyst stuffed. In one week the cite of the cyst was occupied by healthy granulations; in three weeks the patient was entirely cured, and left the city for her home in an adjoining State.

Case—. About nine months back, a German woman applied to me with a cystic tumor, similar to the above; it was certainly as unyielding as solid bone. This tumor I treated by making a crucial incision through the soft parts alone, the flaps were dissected off, and the cyst being exposed, was cut away with a chisel-shaped instrument. The flaps fell naturally into the cavity, and were left, even without a stitch, to take care of themselves. The cure was complete in about a week.

The point I would impress, concerning the diagnosis of these tumors, is, that the pathognomic crackling, so invariably set down in the books, is not always present; for, as I have remarked, having treated some half dozen cases, I have not yet felt, or heard it, consequently I have the right, I think, to affirm that it is not a reliable sign.

There is, however, a tumor of the soft parts of the jaw—cystic, but not osseous—which is not to be confounded with the class just described. Both tumors look, occasionally, precisely alike, but the latter yields under pressure,

*The reader will, perhaps, recall a similar cystic tumor, of rapid growth, which I described in connection with alveolar abscess. A bony tumor, which sometimes gains the size of a hickory nut in a very few days. (This tumor I believe I am the first to describe.)

as any tumor of a semi soft part would yield. M. Paget alludes to such a disease in his lectures on Surgical Pathology, page 342–3. "A woman," he says, "thirty-eight years old, was under my care in 1849, in whom, at first sight, I could not but suppose something was distending the antrum, so closely was deformity of the face due to such disease imitated. But the swelling was soft and elastic, and projected the thin mucous membrane of the gum of the upper jaw, like a half empty sac. I cut into this sac, and let out nearly an ounce of turbid, brownish liquid, sparkling with crystals of cholestearine. The posterior wall of the cyst rested in a deep excavation on the surface of the alveolar border of the upper jaw; an adaptation of shape attained, I suppose, as the result of the long continued pressure of the cyst, which had existed six years."

M. Paget also makes mention of a young man under his care with a similar tumor, which, he says, was the result of an injury to the gum or alveolar border six months previously. In neither of these cases, says he, could I find any disease of the maxillary bone.* Their origin, so far as my experience goes, is in a diseased tooth fang. I do not know what so close an observer as M. Paget means, when he says he could find no disease of the bone. There ought to be at best one little shot-like hole somewhere about the surrounding osseous wall; at any rate, such is the history, as I have met with them.

A succeeding case, which M. Paget mentions, seems to prove that tumors are the same as I refer to. "A lady," he says, "had a small cyst of this kind which had existed twenty-seven years, filling and discharging almost daily. It had its origin in a blow, by which the two median incisors were loosened." This history is that of this particular history of chronic alveolar abscess in every particular.

Last winter, a physician, from Kentucky, applied to me for treatment of a tumor of the lower jaw, which had existed for over two years; it had the feel of a fibroid body. This gentleman, with the imaginative qualities common to the practitioner, when he himself becomes the patient, had succeeded in satisfying himself of the cancerous character of the tumor. An incision through the growth demonstrated it to be a cold alveolar abscess—in a single week he was cured, for the treatment required was, simply keeping patulous the incision, and using a few stimulating injections.

In the *Western Medical Journal*, Vol. X., page 185 to 228, I find a learned article from the pen of Prof. Gross, on "Excision of the Maxillary Bone," in which he makes the following allusion to the osteoid cysts.

"The sero-cystic tumor of the upper jaw is uncommon, and, unfortunately, devoid of malignancy. Its usual site is the alveolar process, where it has been known to attain the volume of a hen's egg, and even of a large orange. It is composed of a thin, semi-transparent, or slightly opaque bag, occupied by a colorless, or sanguineous fluid, or by a glazy, mucilaginous, substance. Sometimes, though rarely, there are two such cysts, either closely connected together, or separated by a kind of osseous septum. The bone around the tumor is expanded into a thin, elastic, crackling, parchment-like shell, and is easily penetrated by a sharp instrument, the puncture giving vent to the characteristic contents of the cyst. This, Professor G. thinks, is the best diagnostic sign of the morbid growth. The general health, he remarks, "remains unaffected in the disease, which is always tardy in its progress, and manifests no disposition to extend among the adjacent structures. Where any doubt exists as to the real nature of the case, he advises a resort to the exploring needle, which, he says, will, usually, at once dispel it.

Prof. G. thinks it is not often this tumor calls for removal of the affected bone; he gives it as his experience, that in general it will suffice to puncture it occasionally with a small trocar, to evacuate its contents, the escape of which, he says, he has found to be often followed by the rapid contraction and final obliteration of the sac. Where there is a strong tendency to reaccumulation, he recommends that a large opening should be made, and tincture of iodine thrown in, to promote the object in view.

The cystic tumor of Paget is, I presume, the same disease of the jaw to which the name spina ventosa was originally applied—spina to express pain resembling the pricking of thorns, and ventrosa, to indicate that the tumor was filled with wind. The term is not yet obselete, but like epulis, is employed so freely that no one now knows what it means.

Recapitulatory.—The cystic tumor of Paget is an osseous cyst of the jaw, which forms just beneath the outer plate of the alveolar, and has

* These cysts I have several times met with. They are, I think I may affirm, cold abscesses.

its cyst, as a result of the expansion and attenuation of the external lamina.

It is seen as a bulb on the alveolar face, is commonly met with about the size of a half hickory nut, the gum which covers it is perfectly natural in appearance. It may yield to the touch, or it may not.

The most satisfactory, and withal perfectly safe means of diagnosis, is to pass a keen scalpel or lancet into the growth; if it is the tumor we describe, the knife will give to the touch the sense of having passed through a bony wall into a cyst.

Such tumors are treated in two ways: Either by dissecting off from the wall the gum, and chiseling away the cyst; or by opening into the cavity by free incisions, and stuffing with lint—this latter is much the easier operation, indeed, it demands no special operative skill, only requiring that the extent and character of the inflammation, which it is the object to excite, should be watched.

Exostosis and Inflammatory Tumors.—These two classes of growths have such parallelism that their description runs naturally into one another.

The term exostosis, as the reader will recall, is made out of the expressive roots ἐς, out of, and ὀστέου, a bone, "an osseous tumor which forms at the surface of bones, or in their cavities." The first is called exostosis—the latter enostosis.

The following varieties have been enumerated: Eburnee exostosis; ivory exostosis—that which is ivory-like. Lamina exostosis—that which is made up of distinct fibres, or layers. Spongy exostosis—that which is like the spongy tissue of bone.

Inflammatory tumors of bone are those having a marked origin, as the syphilitic, the scorbutic, the tubercular.

An exostosis proper is strictly benign; it is a disease of exclusively local signification. It is recognizable by its extreme slowness of growth; the entire absence of pain—except where it has some peculiar relation—its freedom from surrounding disease. It is of bony hardness, both to the touch and exploring needle. It does not tend to ulceration, and does not, except mechanically, affect the parts even most directly associated without it.

True exostosis has its origin in local irritation—perhaps always.

It is true that reference is made by authors to an ossific diathesis, but as truly remarked by Miller, "A skeleton so susceptible, is prone rather to inflammation and its results: abscess, ulcers, caries, and necrosis.

I recall a case to which my attention was once directed by my warm and lamented friend, the late Dr. Townsend, dentist. One of the most generous and noble men I have ever known—may his memory long remain green—where an exostosis was evidently the result of a gold filling, which several years before had been inserted into the cavity of a tooth, and which slightly protruded from its neck.

Reflected periodontal inflammation is a common cause of maxillary exostosis, while it must be admitted that cases occur where no primary source of offence is discoverable.

About ten years ago I operated on a medical gentleman for an exostosis situated just below the orifice of the infra orbital foramen. He could assign no cause for its occurrence.

Exostosis of the fangs of teeth—exostosis dentium—is quite a common disease, and which goes farther than any argument with which I am acquainted to prove an irritative origin of the lesion.

The forms of exostosis occurring here, are the osteo-dentinal and ocemental—and is, of course, peculiar to the region.

While I have seen some two or three cases where the crowns of teeth were enlarged, as if from a species of exostosis, a hypertrophy, yet these were so anomalous, that I may describe the growth as associated exclusively with the fangs, and even here it is mostly confined to the apex, growing as a bulb about the end of the root. Occasionally, however, the whole root is involved, the deposit being quite regularly diffused about it, or the mass may be found as an irregular tubercle on the side of the root.

The diagnosis of exostosis of teeth roots is not always easy. The most frequent pathognomic feature, however, is a sense of continued uneasiness about the parts, not generally amounting to pain, but serving as a constant reminder of the existence of the tooth. The tooth itself may, or may not be carious. Pressure, or the stroke of an instrument does not, in ordinary cases, either increase or diminish the soreness. The sense of fullness about the parts is particularly observed where the absorption of the alveolar is not proportionably active with the exostosis. In these latter cases a different set of features are provoked.

The pressure is sometimes such as to yield the extremest symptoms of tic douloureux, and patients have been treated weeks for such nervous conditions, where the cause was in this direction. Dr. Harris says the diagnosis (in a case which he describes) was gotten by striking the tooth in a certain direction, a sharp pain shot through the jaw, exactly resembling the former attacks.

One of the most remarkable cases of dental exostosis on record is related by Mr. Fox. The subject was a young lady, who, at the time she sought the professional advice and aid of Mr. Fox, had suffered so severely, and so long, that the palpebræ of one eye had been closed for nearly two months, and the secretion of saliva had for sometime been so copious that it flowed from her mouth whenever it was opened. She had tried every remedy which had been recommended by the ablest professional advisers, without realizing any permanent benefit, and she was only relieved from her suffering by the extraction of every one of her teeth.

Mr. S., of Baltimore, having suffered sometime from extreme pain in the left superior bicuspis, applied to a dentist in 1843 for the purpose of having this tooth removed. In the operation the root was fractured about three sixteenths of an inch from its extremity, and the upper part left in the socket, and in consequence of which, he did not realize the relief he had hoped to derive from the operation. The pain continued, and at the expiration of twelve months the gum over the upper part of the alveolus become very much swollen, puffing out the lip to the size of half a hen's egg. The tumor after a few days was opened, and a large quantity of dark colored, purulent, and very fetid matter was discharged, which, for a short time afforded him very considerable relief. The tumor, however, soon reappeared, and was removed some four or five times, by opening it, and discharging the matter in about that number of months.

In the fall of 1845 he called on Dr. Harris, the eminent dental author, for the purpose of obtaining his advice. The gum was swollen, and the lip and cheek protruded as above described. The tumor was again opened, and about three tablespoonfuls of black matter, resembling tar, escaped. Upon further examination the outer wall of the antrum, immediately over the alveolus of the bicuspis which had been fractured, was found destroyed, leaving an opening large enough to admit the end of the forefinger. Believing that the end of the root, which had been left in the socket was the cause of the disturbance, Dr. Harris urged its immediate removal, and to accomplish this, it became necessary to cut away the outer wall of the alveolus. The root of the tooth, on its removal, was found to be enlarged to the size of a large pea. The secretion of purulent matter soon ceased, and in a few weeks the patient was completely restored.

The following case is from Mr. Bell.—

Mr. —— had for some months suffered severe and frequent paroxysms of pain on the left side of the face, apparently commencing in the second inferior bicuspis, and darting through the lower jaw to the ear, and upward to the temple.* The pain resembled tic doloreux in the nature of its attacks, but was evidently produced by a local rather than a constitutional cause, from the paroxysms occurring without the least periodical regularity, and from their being excited by the application of heat to the teeth of that part. On the most careful examination, says Mr. Bell, I could not discover the least appearance of caries in any of the teeth, and I therefore ordered leeches to be applied to the gum, and aperient medicines, and abstinence from all stimulating food. This plan was productive of only temporary and partial relief, and in about two days the pain was as severe as ever. Finding that a smart blow on the second bicuspis produced a more painful sensation than on any of the teeth, I determined on extracting it, and found the extremity enlarged by a deposition of bone, giving to it a slightly bulbous shape, but not larger than the tip of a small quill. The removal of the tooth was followed by immediate and entire relief.

Mr. Bell adds, that the newly-formed bone was yellow and more transparent than the original structure.

Many interesting specimens of exostosed teeth roots may be seen in the Museum of the Philadelphia College of Dentistry.—*To be continued.*

* Neuralgic pains in the fifth pair are felt over the forehead, in the lachryma gland, in the eye, the nostril, at the ear, on the neck, in the maxillary bones, about the tip of the tongue, &c.—This is explainable anatomically. The nerve rises from the pons varoli, centres at a great ganglia by the ear, then divides into three principal branches. The opthalmic, which passes through the foramen lacerum, and is distributed to the forehead, and by sub-division to the neighboring parts. The superior maxillary branch passing from the cavity of the skull through the foramen rotundum, distributed to the parts which names it. The inferior maxillary, emerging through the oval foramen, sub-dividing into the lingual branch, which goes to the tongue, and into a motor, which supplies the muscles of mastication. The inferior maxillary nerve supplies the lower jaw and teeth. Neuralgic trismus is explainable by the compound nature of the nerve.

Water: its History, Characteristics, Hygienic, and Therapeutic Uses.

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(*Continued from page* 311.)

Steam, the brother of water, lived in the bowels of the earth for centuries ere man discovered its utility and mastered its power. So great an agent; so hidden a virtue; so unaccountable a force required the lapse of nineteen hundred years before the extent of its conduciveness in relieving labor was fully appreciated.

What a vast field of discovery and experiment exist between the simple Eolipyle of Hero,* over a century before the Christian era, and the latest inventions of Watt, Fulton, and Stevenson!

Savory first successfully substituted steam for the labor of animals. Newcomen first applied it to a more solid body. Watt made the first steam engine. Fulton applied it first to propelling vessels in water. Evans and Trevithick first adapted it for locomotive on land."†

What mighty intellects; what determined perseverance; what sacrifice of time; what loss of life; what waste of powerful energies; what superhuman efforts did steam exact as equivalents for submitting to be confined within the narrow limits of a business life. From its birth accustomed to mount up to the purest æther and dwell amid the regions of a softer clime; it could not yield to sordid views and work for what would never reach to heaven. The cause of its subjection found only in the gloomy abodes of earthy dwellings—gold—was not sufficient recompense for the gentle, cloud-like form of its mist-like beauty, free as air and pure as nature's own adopted child. And even now, unlike wild animals that can be conquered and completely broken in, never more resisting, steam seeks every opportunity to escape; and, while working with an hundred horse power, strives to burst her bonds, reach a purer atmosphere and leave all sublunary objects to a feebler power. The discovery of hidden wealth has brought renown upon the finder and benefitted much the country that possessed the mine; the successful wars of mighty leaders have proclaimed their names as great—time-honored heroes that they are; the appearance of a new continent in 1492 A. D., rendered immortal the name of Christopher Columbus; but the discovery and application of steam—the soul of water—has heaped blessings on mankind, and taught us to revere the element water in all its threefold beauty and importance.

In *Therapeutics* water must of necessity stand more or less preëminent. In the first place no remedy, be it ever so mild, can be swallowed without the use of a liquid to assist the muscles of deglutition in contracting on the fluid and thus forcing it down. Where a solid substance is administered, the act of swallowing cannot be performed without the aid of the salivary glands, with their apportioned duties, of no small importance to the patient or the man of healthy parts.

In viewing the phenomena of disease in all its different forms, and diagnosticated in every type, be it malignant or of a simple character, we find that the treatment which the medical man is enabled to prescribe is to be found principally in the Pharmacopiæ, and on reading closely the list of remedies, and comparing the different methods adopted by the learned of various countries, one cannot help being struck with this all-important fact, namely: The desire of "washing away the disease" in one way or another, as the case may demand, or the symptoms indicate. Thus we have diuretics to force the kidneys to secrete more rapidly the urine, and carry off much of the noxious materials of the blood, whether it be the urea, or the dead plasma, which, being used in the destruction of blood discs, occasioned by musculary exertion, is now to be eliminated by the malpighian tufts. And here we find that on analyzing urine, out of one thousand parts eight hundred are water and the remaining one-fifth is made of urea, uric acid, sulphates, phosphates, and chlorides, in solution.

But should the kidneys be affected by disease? Should acute nephritis set in, or the sufferer be afflicted with Bright's disease in any form, and the practitioner be consulted for his medical advice; as we know there exists a marked sympathy between the urinary organs and the lungs, and more particularly between them and the skin, its action in summer taking, to a great degree, the labor from the kidneys, and persons, consequently, micturating less frequently in the hot months than in winter, when the little capillaries are closely contracted by cold, the remedy at once recommended, sug-

* Historical and Descriptive Anecdotes of Steam Engines, &c., by Robert Stuart, London, 1829.

† Renwick on the Steam Engine.

gesting the proper means for allowing the kidneys to rest in order to recover their normal power, is a diaphoretic. By this means, and in any congested state they tend, in inflammatory diseases to allay irritation, produce a sudorific effect, and literally sweat off the disease thereby, in connection with the proper anti-phlogistic measures of relieving the patient from the great congestion necessary to inflammation, as in pneumonitis, bronchitis, pleuritis and other diseases of the thoracic organs.

Where there is active congestion, in the first stages of inflammation, resulting from external violence, the application of cold water dressings causes the capillaries to contract powerfully, forces back the rush of blood to the injured part and the sufferer recovers rapidly. But where these little tubules have been stretched until their contractile power is lost, and become, as it were, asthenic, then bathing the wound or bruise with warm water, allays pain by its more soothing influence and opens the pores of the adjacent part, promoting exudation where the blood vessels were in a state of passive congestion. Schmucker (1712–1786) based much of his treatment of wounds of the head upon the judicious application of cold water. Likewise Lombard, (1741–1811,) together with Percy, (1754–1825,) derived a great deal of useful information from a miller, in the Elsass, 1785, who assisted the surgeons in dressing the wounds of the soldiers, in Strassburg, with a solution of alum and water, which circumstances led Percy subsequently to assert that if Sydenham "would not be a physician without opium, he should not like to be a surgeon without water."

Cold water dressings in surgery are esteemed of great practical utility; and, in many cases, become indispensable to the surgeon while in attendance upon the suffering. Though Hippocrates and Celsus were most energetic in behalf of the use of cold water, the sentiment appears to have escaped notice and practical use till Ambrosius Paré, (1509–1590,) discovered anew its tonic properties, while searching for the Italian balsamic oil, which, at one time, wrought such marvellous cures in the healing of wounds and sluggish sores. Soon after this Jaubert and Martel (1600) maintained its wonderful power in alleviating pain. In France, Chirac and Lamorier (1730) proclaimed its virtues; and, in Italy, Sancassani, (1659–1737,) Benevoli, (1685–1756,) and Caldini, (1724–1813,) announced their belief in the stimulating and medicinal properties of certain qualities and quantities of water.

Freezing an extremity with ice and salt, at once deadens sensation by benumbing the nerves, rendered by irritation and consequent tendency of blood to the part, which distends the vessels, and thereby presses upon their thin, attenuated fibres, much more susceptible to pain; and the removal of a splinter from beneath the nail may be effected without the knowledge of the patient. Water-beds, in cases of fracture, or where paralysis has destroyed the power of motion, render the sufferer more comfortable at the time, and prevent, to a great degree, those most incurable of all troubles affecting the sick and enfeebled, namely, bed-sores, which, in too many cases, proclaim the rapid decline of the patient toward the grave. As slight as it may appear, and as common to the person of cleanly habits, frequent ablutions of the body remove the susceptibility to disease, and promote a greater amount of superficial circulation, which renders the man of health better able to cast off any offensive gas that may either have been generated in the system or received by inspiration into the lungs.

In Dr. Leigh's History of Lancashire, mention is made of some chalybeate waters, which he asserts to have found more efficacious in the treatment of "leprous distempers, scorbutic atrophy, the rickets, and scorbutic rheumatism," than any known medicine in his day. And Dr. Floyer remarks, in his "Fourth Letter," &c., "If cold baths are proper for the scurvy and consumption, then they are useful in the several species and complications of them with other diseases."

Were persons to preserve a scrupulous cleanliness of habit, and follow more faithfully than is their wont, the simple laws of common-sense hygiene, doctors' fees would be materially lessened, and that inability on the part of the sufferer to throw off the disease would no longer be an additional cause of prostration, which not unfrequently terminates in typhus.

When it is remembered that twenty-eight miles, and upward, of pores carry off much of the impurities of the blood to the surface of the body, where, if not properly removed by a free use of water, they must remain deposited, and close up their little outlets, it may readily be seen how indispensable it is for man to remove, by frequent cleansing, all that may serve to arrest the progress of this effort of nature to free itself of any morbific tendencies.

We are indebted to Lavoisier and Seguin for some valuable data relating to the quantity of vapor excreted from the surface of the body and exhaled from the lungs. After many careful and elaborate experiments, Seguin especially ascertained that the maximum amount of pulmomonary and cutaneous exhalation, in twenty-four hours, amounted to five pounds; the minimum, owing to one or more special causes, one pound, eleven ounces, and four drachms, (xlii. 1790.) Valentin, by exact measurement, discovered that a person, in a normal state of health, who consumed each day forty thousand grains of food and drink, exhaled from his skin and lungs some three and a half pounds. By making due allowance for the weight of the carbonic acid, and deducting all that may come from the respiration, two and a half pounds are found to be the diurnal exhalation of the skin. Much of this transudes, if we adopt Krause's "estimate of about eight square inches for the total evaporating surface of the sudoriforous glands." Hence we cannot fail to see the urgent necessity of removing, as soon as may be, the accumulation of any foreign material that, by its presence, prevents a free transpiration, etc., in future.

Most of the diseases the physician is called upon to treat, in a slightly modified form, begin with inflammation in the first stage of congestion and the consequent symptoms that ensue. As the disease advances, either lymph or serum is cast out through the distended vessels; and, lastly, absorption or some temporary effort of the organ, affected, to free itself from the foreign matter, ends the case.

As for example, let the pleura be taken as a type of inflammatory action. The first cause of pain is that occasioned by the dryness of the two surfaces in the congested state. The friction sound that the auscultator hears so distinctly, is caused by the movement of the sides of the pleura at each inspiration and expiration. And now, in pleuritis, the normal amount of fluid (composed chiefly of water!) that so beautifully lubricates the surfaces, has disappeared, and this unusual attrition of parts brings about that peculiar shooting sensation in respiration which is so distressing to the patient and at once demands speedy relief. In the second stage, the serum of the blood is effused into the sack formed by the two membranes, and thus compressing the lung of the affected side throws double duty upon the healthy lung, and not unfrequently brings on, by this additional labor, emphyzema—at times producing death by apnœa, or by displacing the heart, and, consequently, accelerating the pulse, syncope terminates the life of the already-exhausted patient. The serum contains, as its principal ingredient, water, and, if not removed by absorption, increased by the judicious administerings of antimony, Dover's powder, nitrate of potash, acetate of potash, or any of the diuretics or diaphoretics, this serum, with more or less lymph, which may have exuded through the little capillaries, will degenerate into pus; and empyœmia may call for paracentesis thoracis to lessen the complication and save life, which is rapidly declining under hectic symptoms of an aggravated character. It is curious to the thoughtful that this disease, rendered dangerous by the excess of fluid effused into the pleural sack, is also caused, in a great measure, by the prompt use of such remedies as shall promote a free diaphoresis and continued secretion of the kidneys, and likewise by the moderate use of *hydra-gogue* cathartics.

Thus also with the brain, encephalitis presents an unfavorable prognosis from the fear of effusion, which may terminate in hydrocephalus, and, by the constant pressure upon the brain, produce death in a more or less speedy manner.

Diseases of the heart, apart from auscultation, are recognized by the appearance of anasarca; and so invariably are the two associated that an able practitioner of this city said, that "tight boots at night" may be considered as one of the certain proofs of cardiac trouble. And not unfrequently is the patient "drowned in his own fluids" ere the valves of the heart have ceased to perform their functions, disordered by atheromatous deposits or hypertrophy, occasioning dilatation and consequent regurgitation. Chronic disease of the kidneys may be diagnosed, together with other symptoms, by the presence of dropsy, œdema of the inferior papebral sinus, being an additional proof of the existence of renal disorder.

And when that largest of all organs in man, so much abused by him in his excesses of enjoyment and epicurian mode of living, is diseased, one of the strongest signs of cirrhosis, after palpation has revealed the decrease of size, and nobby feel of its surface, is ascites, resulting from the chronic congestion of the liver; consequent engorgement of the portal vein, and likewise tension of the mesenteric veins. The capillaries cannot resist the increased amount of pressure from within, and serum is effused—

the liquor sanguinis being the watery composition in blood.

Curious moral is it indeed, when man seeks to live beyond his capacity and overtaxes what has been provided for moderate enjoyment, neglecting the much revered precept, "Μηδεν Ἀγαν" of Aristotle, to gratify a pampered and depraved appetite; when he passes hours at the sumptuous repast, and partakes too freely of alcoholic stimulants, till the brain reels from the excess of carbon in the blood; his last desire before consciousness vanishes, is to satisfy a parching thirst; and now he pushes aside the rich o'erflowing goblet, crimson, a proper type of another victim slain for Bacchus, and seeks the cool, unequaled water, to refresh his burning throat and inflamed imagination. This is but the result of intemperance so well described below:

* "Of all the evils darkening here below
Thy hand, intemperance, works the direst woe!
Could all the gathered tears attest thy might,
Oh what a sea would welter on the sight!
Could all the moans be heard from thy career,
What a wild sound would peal upon the ear!
Could all thy victims march in dread array,
Across the world would stretch their blackening way.
Thine, the poor drunkard, reveling in his shame;
Thine, the young bride that bears his blighted name."

Such are the poet's sentiments! He lives a drunkard and dies of dropsy. The result a hob-nailed liver. In metaphor, each nail resulting from a separate debauch, and significantly typical of his driving with each successive drink a nail into his future coffin lid.

In apoplexy, where the effusion of blood into the encephalon renders the life of the patient of doubtful issue, the application of bags or bladders of ice to the head, lessens the dull, heavy pressure, and serves to drive out the blood through the smaller vessels from the centre of thought. Acute gastritis is oftener allayed by swallowing small pieces of ice, than by administering the multifarious decoctions and much abused opiates, which only deaden consciousness and relax the system, but cannot reach the inflamed stomach as readily. This, the latest treatment, applied to cases of a similar character, dates as far back as the time of Themison, a disciple of Asclepiades (50 a. chr.) who was accustomed to reduce all treatment to the principle of contraction and relaxation, and whose follower and admirer, Eudemus, strongly advised cold clysters as a remedy for the alleviation of gastralgia.

* Alfred B. Street.

Celsus (23 p. chr.) advocates the use of water as a bath, affusion, or even in the capacity of a beverage, for almost every disease of the alimentary canal, and, what is most curious, even when the patient is afflicted with that most agonizing of diseases, hydrophobia.

The strong prejudice against the use of cold drinks, and especially that of cold water in fevers, or when the usual dose of mercury has been given, is greatly removed by the more enlightened and a wider experience in philosophical investigations and practical truths, deduced from facts of a most interesting character.

It is found pleasing to the taste, cooling in its effects, and productive of a freer diaphoresis. And the moderate sponging of the body after a long and protracted illness, with warm water and soap, promotes a more healthful and certain circulation, which takes off, as it were, an oppressive load from the system. This was urged by Rhazes, (923), whose boldness of conception was only equaled by his originality of thought. In phthisical persons, where tubercles have filled up portions of the lungs, and percussion reveals a marked dullness near the apices, a free use of the sponge bath greatly assists the breathing, which has for its immediate object the æration of the blood; and if any of the onus can be removed by the skin, acting in connection with the pulmonary apparatus, much benefit is derived, and life is positively prolonged.

Even the Emperor Augustus, following the advice of the learned Antonius Musa, abandoned the enfeebling "fur-lined apartments," which he had occupied from a fear of approaching phthisis, and, by a judicious use of water, braced his system, and recovered tone. To this same Musa was the susceptible Horace indebted for much refreshment after many a night's "three times three," by the stimulating influence of a cool bath. I would not have it thought that I entertain any of the views of those over-enthusiastic so called "hydropathists." Such is not the case. It is only my object to trace out the uses, history, and interesting details connected with the characteristics of water, that lead me to enter into the opinions of the past and present practitioners, as regards the purity and indispensible qualities of all that may pertain to it.

Among the many diseases to which man is heir may be enumerated hydrocele, hydatids, hydro-thorax, hydro-cephalus, hydro-pneumothorax, and many others that terminate in

dropsical effusion. Hydrophobia is one of a special character, no affliction surpassing in its evil consequences and present agony, this dreadful, spasmodic horror of water, whose very presence throws the strongest man into immediate convulsions; and which has for centuries baffled the closest investigations of the learned, and overcome the most powerful constitutions of the healthy and energetic. Ovarian dropsy is a disease not unfrequently met with in practice; and though absorption may carry off some of this extra, watery fluid; and other remedies temporarily free the sufferer; water still accumulates, and at length assumes an unchecked sway. Gradually it pervades the entire system, crawls up the intestinal canal, disturbs the respiration, deranges the stomach, and death follows as victor.

How exquisite is the provision of nature! How indicative of a Higher Power is the "Bag of Waters," in which the infant yet unborn is carried, protected from the sudden blow of accident or outward violence. How utterly indispensable for fœtal life; how impossible for parent or child otherwise to go on till the proper time of parturition.

As a proof of the importance of preserving the waters as long as may be, during the first stage of labor I quote the following:

"Si la texture des membranes est lâche, leur rupture dès le commencement du travail. Chez quelques femmes, les eaux s'écoulent avant quélles aient été averties par des douleurs, des effort contractiles de la matrice. Dans quelques cas, on a vu le travail tarder huit à neuf jours à se déclarer." *

When that all important period has arrived, and nature calls for a commencement on the part of some one, how responsive to this appeal and how gentle is the persuasive, wedge-like pressure brought to bear upon the os, dilating the cervix by its gravity, and at the same time irritating the nerves distributed to that part; thereby summoning the uterus to contract with all powerful efforts and give forth what had lain concealed for nine long months of gradual, placental life. All who have attempted version in mal-presentation, or when the exhaustion of the parturient female calls for immediate delivery, can testify to the incalculable benefit and incomparable assistance to be derived from the "Bag of Waters." By this means, with great rapidity and moderate facility, the child may be turned, the uterus being kept back for the time by the distended sack filled with the miconium. But how impossible and vain are the attempts of the ablest accoucheur, who, attended by no unnatural obstruction, endeavors to manipulate, when the arm becomes paralysed by the almost incredibly powerful contractions of the womb; so that at times it becomes the duty of the assistant to deliver first the doctor, and then the fœtus. The empyric cannot fully appreciate the wonderful assistance of this bag, but the man of experience preserves it till the last moment, and well might the child born with a "caul" be esteemed most fortunate.

*Dictionaire des sciences médicales.

Medical Societies.

TRANSACTIONS OF THE BROOKLYN MEDICO-CHIRURGICAL SOCIETY.

Regular Meeting of June 25, 1861.

Daniel Ayres, M.D., President.

INJURY OF THE FRONTAL BONE, FOLLOWED BY EPILEPTIFORM SYMPTOMS — TREPHINING — COMPLETE RECOVERY—REMARKS AND DEDUCTIONS.

Dr. Daniel Ayres exhibited to the Society a little boy, nine years of age, and stated that he desired to complete and make some comments upon the history of an interesting case, which would be recognized by those gentlemen who had attended the service of the Brooklyn Medical and Surgical Institute.

In the early part of August last, this lad received a blow from a stone which inflicted a lacerated wound over the right frontal eminence. His immediate symptoms were those of concussion, followed by vomiting and headache, from which he soon recovered, whilst the wound, after suppurating, healed by granulation, leaving a marked cicatrix, elevated by the permanent thickening and induration of subjacent tissues. In the month of October following, and shortly after the wound had closed, the attention of his family was attracted by the marked change which had taken place in the boy's disposition and character.

Hitherto he had been peculiarly mild, gentle, and tractable, but gradually became irritable, peevish, morose, and occasionally showed great violence of temper upon the slightest provocation, and a disposition to cry frequently. These paroxysms of excitement were soon accompanied by vertigo and headache, with increased disturbance of his general health. Whilst standing, at such time, he would reel and stagger, occasionally loosing all consciousness, and falling down, his countenance becoming very palid, but no spasm or frothing at the mouth were noticed. During the intervals, his demeanor and aspect were mopish and sluggish; his appetite capricious, and bowels persistingly torpid; his gait

was unsteady, with a tendency to trip and drag, rather than raise, the left inferior extremity.

The boy had been very properly removed from school, and submitted to judicious and appropriate medical treatment by his attending physician, Dr. Cullen; but no control was apparently gained over the symptoms, which became steadily more aggravated up to the ensuing February, when he was admitted to the Institute.

A careful inquiry into his condition and history at that time, seemed to justify the suspicion that the original injury inflicted upon the skull, if not accompanied with fracture of the internal table, had, at least, given rise to serious consecutive changes within, and this suspicion was strengthened by the permanent and decided elevation over the seat of injury. Although unable to define the precise character of this lesion, all were of the opinion that the increasing severity of the symptoms justified an attempt to relieve them by what appeared to be the only rational procedure, viz., the application of the trephine. Perhaps we were more than usually urged to this conclusion by the unfortunate termination of a case of recent occurrence in this city, almost identical in its causes and manifestations, in which the post-mortem examination (kindly furnished by Dr. John Cooper, who witnessed it,) revealed a depressed stellated fracture of the internal table, which had gradually superinduced disease of the membranes, and fatal pressure on the brain.

An operation was accordingly performed on the 9th of February last, by dissecting up a quadrangular flap of integuments, including the cicatrix in its centre. The conical trephine (recently brought again to the notice of the profession by Dr. Galt,) was applied, and most satisfactorily fulfilled all the advantages claimed for it. For, notwithstanding the youth of the subject, and the unequal thickness of the button of bone, (from one-sixteenth to one-eighth of an inch thick,) it was quickly removed, in the crown of the trephine, without injury to the dura-mater from the teeth of the instrument. Whatever, therefore, may be urged on the score of originality, Dr. Ayres was confident that no surgeon could employ this valuable contrivance without duly appreciating the sagacity of Dr. Galt.

After the operation the flap was secured by a suture at each of its inferior angles, thus forming a valvular cover over the opening in the skull, at once excluding external agents, giving vent to exudations, and favoring rapid union. Cold water dressing alone was applied, and the case progressed satisfactorily until the third day, when a violent convulsion attacked the left side of the body, accompanied with smart fever, headache, vomiting, and delirium. Mild purgation, with steady cold to the head, mitigated these symptoms; but the convulsion was repeated on the next day, and then extended to the whole muscular system. Croton oil with sub. mur. hyd., were now administered, until copious alvine results were obtained, and all untoward symptoms speedily disappeared. It was discovered, on inquiry, that he had been allowed full diet through mistake of the nurse, and this important point was sedulously watched and restricted during the subsequent treatment.

At the end of the third week the wound was entirely closed, and no recurrence of the epileptic symptoms has taken place up to the present time, whilst the patient has entirely regained his former gentle disposition, and, with a good appetite, has wonderfully improved in flesh, strength, and general appearance.

Dr. Ayres remarked, that whilst we had before us an undoubted case of recovery from a disease, too often beyond control, following an operation justly considered too serious and uncertain in its results to merit trial, except as a dernier resort, it had stimulated reflection, and given rise to certain conclusions, which, to his mind, constituted the chief features of interest about the case. To recur to the condition of the button of bone removed, it had been found, in all respects, perfectly normal. The parts beneath were equally without indications of previous injury, or existing disease. How, then, are we to reconcile this total absence of the suspected, or indeed of *any* cause, adequate to the production of such morbid phenomena, with the entire success of an operation which revealed nothing, and which, failing in its proposed object, was apparently useless, if not inapplicable?

This result might be classed in the chapter of accidents, if we had not already too many cases, sufficiently parallel, to justify us in seeking for a rational sequence between the operation and the cause of disease.

Again, the removal of pressure from the brain, by favoring its power of expansion, or, perhaps, allowing some modification of its circulation, has been adduced to account for this dissipation of the epileptic symptoms; but it should not be forgotten that these advantages are seriously curtailed by the tense and unyielding dura-mater when left uninjured. Besides, it will be recollected, that this patient suffered his worst epileptic seizures after the bone had been removed. No rational explanation of this paradox occurred to my mind until recently, and I am indebted for it to the experiments of Brown-Sequard. The importance placed by that distinguished physiologist upon what is known as "the epileptic aura," and the paramount necessity of patiently and repeatedly searching until the spot is found whence it starts, or seems to take its origin, seemed very applicable to this case; and, from its traumatic origin, very easy, when we came to direct the attention of the patient upon his feelings, for he distinctly recollected that he always felt pain and unpleasant sensations in the vicinity of the cicatrix just preceding the vertigo.

Then, again, Brown Sequard has obtained remarkable results from cauterizing this sensitive spot, whereby we may infer, that the morbidly sensitive nervous filaments are either destroyed, and cut off from their cerebro-spinal connections, or, at least, so modified in their function, that the chain of morbid phenomena is temporarily, and occasionally, permanently broken.

Is it not, therefore, probable that, to the free dissection of the flap, including the periosteum and cicatrix, we are indebted for the REAL cause of relief in *this* and similar cases? Is not this probability augmented, when we find paroxysms supervening, more severe than on any previous occasion, just at that time when the wound was swollen and about to suppurate; when, in fact, local irritation

was at its maximum, and the irritation of undigested food in the alimentary canal was superadded?

We think the sequence is complete, and the deduction logical, that, in all such cases, before hazarding the serious operation of trephining, the superficial tissues which have been the subject of injury should be freely separated from the parts beneath and around, by subcutaneous division. This plan failing, a portion, sufficient to include all the injured nerves, should be freely dissected out, and its place supplied by sliding together the contiguous tissues, or by a patch transposed from neighboring parts.

Dr. Lewis A. Sayre stated that nearly a year had elapsed since he performed a similar operation upon an adult, on account of epilepsy following a blow received many years previously on the occipital region, and immediately over the longitudinal sinus. The case had resisted all medical treatment, and he was a confirmed epileptic up to the time of operation. Although the disease had not since returned, yet he had been very much disappointed at the time, and had ever since been at a loss to account for the relief thus obtained, inasmuch as the portion of skull removed by the trephine was found absolutely free from exostosis or any other morbid change. He considered the explanations offered by Dr. Ayres as highly probable, and calculated to render our treatment of these cases equally successful, without danger to the patient.

Dr. Andrew Otterson remarked that the relation of these cases brought to his recollection the case of a sailor who suffered from epilepsy following an injury, upon whom Dr. Buck operated several years ago. When the bone was removed no disease was found, yet the patient recovered, and he learned, on inquiry a long time afterwards, that no return of the epileptic attacks had taken place.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of Medical Journalism.

By O. C. Gibbs, M.D.,
Of Frewsburg, N. Y.

ERYSIPELAS FOLLOWING VACCINATION.

In the *American Medical Times* for June 22d, Dr. J. Lewis Smith has an article upon *Infantile Erysipelas*, in which allusion is made to a form of erysipelas following vaccination. Referring to several cases, the following remarks are made:

"In another instance, a well-known physician of this city vaccinated three children—one his own, with the same virus, being careful to have the lancet clean. On the seventh day after vaccination, these children were all taken with erysipelas, his own dying. Another physician informed me that he, not long since, vaccinated with the scab two children in the same family, with all the precautions that he had ever used, and both were soon after taken with severe and pretty extensive attacks of erysipelas, extending from the point of vaccination, *the vaccine disease not appearing*. Such cases render it probable that the vaccine virus may sometimes contain a latent deleterious property which may give rise to erysipelas."

We have alluded to this subject for the purpose of making a few practical remarks upon a subject of vital importance. Less than two years ago, the citizens of Westford, Mass., were excited upon the subject of small-pox, and, instead of consulting the physician of their vicinity, they raised a subscription and sent to a virus pedlar, in Boston, for vaccine matter. All the persons vaccinated with the virus suffered terribly with phlegmonous erysipelas, and quite a number died! About the same time, in San Francisco, a gentleman consulted a physician, requesting him to vaccinate his two children. Unwisely particular, he would not let the physician use matter of his own selection, but insisted on his using that which he had provided. The children were vaccinated, unhealthy sores, three inches in diameter, formed, and for thirty days the patients vacillated between life and death, but finally recovered. Most of all, in none of these cases was protection secured against small-pox, for, in all probability, the vaccine disease did not occur at all. The cause of these unfortunate results is readily explainable, and might very easily have been avoided. The *first scab* of a vaccine sore is alone good, reliable or safe. If this is rubbed or scratched off, at about the period of its maturity, no other *specific* one will form. It is true, the sore may inflame; pus, healthy or unhealthy, may ooze out, dry down, and form a scab. But, instead of being vaccine virus, it is dried pus, and, if unhealthy, it may develop all the terrible consequences of a poisonous dissection wound. Hence the importance of all vaccinations being performed by a physician, from matter saved by himself or by his special directions. Every pains should be taken to procure positively *specific lymph*, and not dried, unhealthy pus, for purposes of vaccination.

CHLORATE OF POTASH IN SMALL-POX.

In the *American Medical Times* for June 22d, Dr. J. T. Read, of Ohio, has an article upon the above-mentioned remedy in variola. In the suppurative stage of small-pox, dyspnœa is a very common and troublesome symptom. Dr. Read says that, under the action of the chlorate of potash, this symptom is greatly, and often entirely, relieved. He says:—"The result of the previous cases induced me to adopt the remedy in all the subsequent ones—sixteen. In the latter number, there were some as well-developed cases of the confluent form as in the former. They appeared equally severe, and one, perhaps, even severer than any

of the former ones. Yet in no instance did they suffer or complain of symptoms of suffocation. What to attribute it to other than the remedy—chlorate of potash freely used—I know not." Of the sixteen cases, none died.

Less than half a century ago, the chlorate of potash found many warm admirers. It was used in a great variety of diseases, and consumption was among the number. It fell into neglect, and its use was mostly confined to cases of stomatitis and mercurial ptyalism. Lately it has found favor and advocates in a great variety of diseases. It is too much to expect that it will hold its present ground, and accomplish all its friends claim for it. It is probable, however, that it will never fall again into entire neglect, but will find its proper place and importance in the *materia medica*, and that place and importance steadily held and maintained.

PUS CORPUSCLES IN THE AIR.

The *Boston Medical and Surgical Journal* for June 20th, contains a paper by Dr. Throph, translated from the German, upon the subject of pus corpuscles in the air. The doctor attended several cases of acute conjunctival blennorrhœa, and, fully aware of its contagious nature under certain circumstances, he took every precaution to prevent the contact of pus with his own eyes, and also gave cautions to the sisters of charity, who acted as nurses. All suffered more or less, though no contact with pus had been had, save through the medium of the atmosphere. An attempt was now made to prove that the air was really the medium for the transmission of pus. The experiment consisted in "driving a certain quantity of air across a glass plate moistened with glycerine, upon which the particles of dust and microscopic forms remain fixed," and thus were readily examined by the microscope. The apartment was thoroughly ventilated, and then the air examined, "*pus corpuscles were detected in the atmosphere by the very first transmission through the apparatus.*"

We consider this an important discovery, and destined to have an influence in the study of epidemic and endemic diseases. Cannot the real source of autumnal or malarial fevers be thus discovered?

Bearing upon the above, we may observe that M. Honzian, of Paris, has sent in a paper to the Academy of Sciences, in which the capacity of atmospheric air, as a vehicle of miasmatic influence, is discussed. He says:—"If pieces of litmus paper of the same size be exposed to the air on the same day and at the same hour, in a spot sheltered from rain as well as from the solar rays, it will be found that, in the country, these bits of paper will have lost their color entirely at the end of three or four days; whereas, in a town hard by they will have undergone little or no change. But, at the same time, it was observed that, though the discoloring or bleaching power of air is stronger in the open country than in a town, the power of converting the blue tint of litmus into red is much greater in a town than in the country. In general, the evidence of an acid condition of the air, as manifested by this change of color, may be obtained forty-eight hours after exposure." . . . "At Rouen, it was noticed that blue litmus is discolored much more completely at the top of the cathedral than at a distance of six yards from its base."

We abstract the above from the *London Lancet* for July. We think that the abnormal and varying conditions of the atmosphere, as causative of disease, require to be studied anew, and it is hopeful that the harvest in this new and difficult field may well repay the adventurous, scientific, and industrious laborer.

MONSEL'S SALT IN EPISTAXIS.

The editor of the *Pacific Medical Journal*, David Wooster, M.D., reports a case of alarming epistaxis promptly and permanently controlled by the application of Monsel's salt. The patient had been bleeding for *nineteen hours*, seemed perfectly exsanguined, with a pulse at 130. The nostrils were cleared from clots, and the salt applied in substance; the arrest of the hemorrhage was prompt and permanent. The application was repeated as a matter of safety. Dr. Worcester says: "We have yet to record the first instance of a failure to arrest this and after bleedings when this remedy is rightly applied, and is at the same time properly prepared."

MORBUS COXARIUS.

In the *American Medical Times* for June 29th, Dr. L. A. Sayre has a clinical lecture upon morbus coxarius and its treatment. In regard to its origin and cause, he makes the following remarks:

"I believe that many have attributed the source of this disease to a strumous origin, simply from the *appearance* of the patient, whose emaciated spanæmic condition is regarded as the *cause* when it is in reality the *result* of the disease. I have seen children of perfectly healthy constitutions, in whom the disease arose from an evident traumatic cause, so reduced, in the course of a few months, by the pain and sleeplessness attending the disease, as to present, in a very marked degree, appearances which strongly simulate the strumous cachexia." . . . . "What I wish to establish is this: that, although the disease, in different individuals, arises from very different causes, *yet it never arises in any individual from a purely idiopathic or constitutional cause.*"

Would Dr. Sayre say that constitutional

causes *never* give rise to local inflammation or to local disease of any kind?

Our readers are, doubtless, well aware that one of the most important indications of treatment in this disease, particularly in the first stages, is to counteract the natural contraction of the muscles, and thus take off pressure from the diseased surfaces, and to secure immobility of the joint, and thus prevent friction. This indication fulfilled, and pain, which is severe and protracted in this disease, is at once removed. For a few years past, this has been accomplished by the use of splints. He who attempts to treat a case of morbus coxarius, from the beginning, without the use of splints, certainly does not do his duty to his patient. There are now, at least, three splints before the profession for the accomplishment of the objects mentioned.

Dr. H. G. Davis, of New York, was, perhaps, the first to construct and apply a splint in this disease. Dr. L. A. Sayre, also of New York, devised a slightly different one. We believe it is claimed to be only a modification of Dr. Davis', and yet it is claimed to be a decided improvement.

Prof. E. Andrews, of Chicago, has also devised a splint for this disease, which differs from the two just mentioned in several particulars. Both of the others are applied to the outside of the thigh. If there be an opening, it is generally upon the external face of the limb, in a position to be chafed by the splint, and the latter and its padding to be soiled by the discharges. Anterior to suppuration or to an operation, this objection does not hold. Dr. Andrews' splint applies to the inside of the limb. In Sayre's and Davis' splints, the body is supported by a perineal band; in Dr. Andrews', the top of the splint is of crutch-form, presses against the perineum, and thus supports the body. In the latter, the bottom is firmly fastened to the sole of the shoe, and extension is very ingeniously made by a screw working in a tube. Dr. Andrews says, after careful examination, he prefers his splint. It certainly has the advantage in simplicity, and its cost (an important item) is only about one-third of that of the others; but, really, we do not see how he secures immobility of the hip-joint. Will the professor tell us if he regards this as non-essential? If so, certainly a great convenience is gained in sitting down and getting up.

Dr. Sayre has just made a modification of his own splint, which, in some cases, he regards as a great improvement. He says of it, "The principle of extension and counter-extension embraced in it is identical with that of the original splint, with this improvement, that the extension is made from the knee instead of below it, leaving the motion of the knee-joint entirely free. This is accomplishing a desirable object, and I now employ this instrument in every instance where it can be used. There are cases, however, in which it cannot be used, as for instance in a very young child whose thigh is too short to afford sufficient surface for the attachment of adhesive plaster; nor can it be used in a case where fistulous openings are so numerous, and so situated as to present the same obstacle. In these cases the original long splint is employed." This last meets our ideas of the requirements of these cases better than either of the others. We confess, however, that a trial of each might change our opinion.

We wish to make a remark here: Dr. Andrews' splint and opinions in regard to it, have been nearly a year before the profession. Since that several essays have been published and lectures delivered by New York authors and teachers, and, as yet, no allusion has ever been made to it. If physicians of Eastern cities are to exclude the opinions of physicians of Western cities, what have the thousands of us who live in the country to hope for, who, perhaps, are laboring equally zealously in the service and for the advancement of our noble profession.

REMOVAL OF THE CARPAL AND METACARPAL BONES.

In the Boston *Medical and Surgical Journal* for June 27th, Prof. E. S. Cooper, of San Francisco, reports a case of successful removal of all the carpal, and parts of all the metacarpal bones, accompanied with remarks, from which we are disposed to make a quotation or two. He says, "Excepting among practititioners of San Francisco, it is rare that surgeons attempt the cure of a patient laboring under disease of the tarsal, carpal, metatarsal, or metacarpal bones, without either removing all the bones that are diseased or amputating the limb."

We copy the remarks entire. "The method of keeping the wound open, as pursued in this case, is in accordance with my universal custom in the after treatment of surgical wounds made in operating upon the bones. Though in this case there was no exfoliation of bone during the convalescence, this is a frequent occurrence, and for this reason no such wounds should be made to heal otherwise than by granulations; because, if we promote healing by first intention on the outside, and exfoliation should occur, it will be a source of great local, if not constitutional irritation, provided the exfoliated bone be confined within the limb. By keeping the wound open, however, and causing it to heal entirely by granulation, the detached bone, if any exists, will find an easy egress.

"The second consideration is that of keeping lint in the wound and a roller tightly around the limb, the granulating surface as well as the adjacent parts, thus becoming so consolidated as to prevent the accumulation of purulent matter in any of the neighboring parts, the condition most to be feared after these operations."

We should have observed that, in the case reported, the carpal bones were removed with the chisel, and portions of the metacarpal were removed with a heavy pair of bone forceps.

Prof. Cooper's method of treating wounds of the joints differs somewhat from that usually directed in the books. He fears not the effects of air even in the knee-joints, and in severe wounds, or after operations on that joint, he dresses open, with lint and bandage, and thus heals by granulation. A few weeks since we were called to a case of severe wound of the knee-joint. The wound was made with an axe, which just touched the patella on the inner side, and entered the joint freely, wounding both the *femur* and *tibia*. The wound was oblique—passing from within outward and downward. No physician was called at the time, it was carelessly dressed, and the patient was for a time about on crutches. We saw it ten days after the accident—the joint was much swollen, and the opposite surfaces of the cut were gaping, and at least two and a half inches asunder. The discharge of synovial fluid, or the secretions of the joint cavity, was quite profuse. We dressed with adhesive strip and roller, and the wound healed without untoward symptoms, by a slow process of granulations and cicatrization. The constitution suffered far less than we expected.

EMETICS.

In Dr. Ware's sixth lecture on General Therapeutics, to be found in the Boston *Medical and Surgical Journal*, for June 27th, we notice the following remark: "I am satisfied that, as a consequence of the growing reluctance among physicians to the administration of the more active remedies, emetics are less commonly prescribed than wonld be useful, and that they might be more frequently employed than is now customary, for the removal of many symptoms not positively dangerous, but which produce much discomfort, and sensibly protract recovery."

Dr. Ware, however, is no advocate of the indiscriminate use of emetics, and would not administer them without clear indications. It is probable that their use, especially in children, requires more caution than any other class of remedies. Certain are we that in the hands of irregulars, we have seen several deaths directly traceable to emetics, an observation we have never made in regard to any other class of medicines.

NITRATE OF POTASH IN THE CURE OF INTERMITTENT FEVER.

Dr. Amos Sawyer, of Hillsboro', Ills., gives his experience in the use of this article in the cure of intermittent fever, even where quinine had failed. His formulæ for its administration is as follows:

℞. Pottassæ nitrat., gr. x.
Spr. vini gallici-vel. aquæ, ℥ ss.
S.—M.—Take immediately.

And he adds: "In my opinion no preparation is equal to it; for it possesses antiperiodic properties completely, and may be administered, when the stomach would not tolerate quinine. I deem it a specific in ague; for I have never failed to arrest the paroxysm, if uncomplicated. You will also find that the patients are less liable to relapse than in those cases cured by quinine. In the cold stage, if administered in a full dose, and the patient be placed in bed and covered with blankets, he will in a few minutes experience considerable heat, which will be followed by copious perspiration, and every unpleasant feeling will vanish. It is seldom the patient will experience a second attack. Where it is more agreeable to the patient, the powder may be placed on the tongue and permitted slowly to dissolve.

"I shall not attempt to explain the action of this medicine on the system in the cure of ague, but will leave that to older heads than mine to determine; still, we do know that after it is taken into the stomach and becomes absorbed, it has the chemical effect of changing the dark-colored venous blood, to arterial, or at least it changes its color. It also acts on the kidneys as a stimulant producing diuresis, as well as diaphoresis; and in this manner may rid the system of the poison that causes the ague; provided that poison is produced 'by the retention of materials destined for excretion.' This medicine more closely resembles nature's mode of curing this same disease than any other; as she cures by copious diaphoresis as well as diuresis, or in other words by elimination."

AMENORRHŒA CONNECTED WITH AN UNDERSIZED UTERUS.

Dr. Simpson, in a "Lecture on Amenorrhœa; its Local Treatment," published in the *Medical Times and Gazette*, gives the history of a case and its treatment as follows:

"The patient was the sister of a doctor, and had been under the care of various medical men at different times, had from puberty suffered from amenorrhœa and its attendant evils, more especially from asthma, recurring every month, and lasting for several days, and interfering sadly with her health and happiness. She had never once menstruated regularly, the uterus being slightly undersized. She had taken quantities of medicine of every possible kind, had been repeatedly leeched, and had been subjected to many different local applications, sometimes with some little relief to her symptoms, but never with any result at all approaching to a cure. Believing that in such a case all

hope of radical relief was vain, except through measures directed towards the uterus itself, I persevered for a time in the application of nitrate of silver to the lining membrane of its cavity, in the manner I have described to you; and the operation was always attended with more complete and lasting relief than the patient had ever before experienced. This treatment was for several months persevered in; but, both she and I having become tired at last of imperfect and transient results, I had recourse to the introduction of a small metalic pessary into the uterine cavity. In the case of the lady of whom I now speak, the introduction of this instrument was followed by the speedy relief of all her more urgent symptoms, and particularly of her monthly fit of asthma, and after she had worn it for some weeks she was equally astonished and delighted to find, at the recurrence of her next period, a free menstrual discharge, instead of the dreaded apnœa with which she had been so long afflicted. She continued to wear it for ten or twelve months, until her health became so far restored that she was able to go to a ball,—a kind of amusement in which she had never before been qualified to indulge. When the discharge appeared to have become fairly established, the instrument was at last removed; and for some months the patient continued to menstruate regularly and to enjoy good general health. On the recurrence of cold weather, however, the uterus again failed to perform its function, and instead of having the proper menstrual discharge, she was attacked with one of her old fits of asthma. At her own suggestion and urgent solicitation I again introduced the galvanic pessary; and she wore it for about three years altogether, without ever experiencing from it any kind of inconvenience. The uterus during that time performed its functions painlessly and regularly; the secondary symptoms were all kept in abeyance; and it was only at length finally removed when the uterus was found to be equal to the performance of its functions without the presence of any irritant in its interior. The same good effects, which were here produced, I have seen resulting from the use of the intra-uterine bougie or pessary in various similar cases.

DEATH FROM HYDATIDS IN THE BRAIN.

An inquest was held at the Walsall Workhouse, on an inmate of the workhouse, twenty years of age, who was found dead in bed on Sunday morning last. On her admission she complained of a pain in her head, and was treated for it by the medical officer. On Saturday night she went to bed as usual, but just before eleven o'clock she complained of her head, and said she felt as if she should go mad. In a few minutes, however, she appeared to get composed, and to fall asleep. On the following morning, about six o'clock, she was found to be dead in bed, but was quite warm. Dr. Burton stated that on opening the head of deceased, he found the veins distended with dark-colored blood. There were no signs of recent inflammation, but in the ventricles a quantity of sanguineous matter was found, and the brain was softened in places. In the *tuber annulare*, where the brain and the spinal marrow join, were four hydatid sacs or *cysticerci cellulosa*. These conditions, he considered, were sufficient to account for the suddenness of the death of the deceased. He had ascertained from her brother that she had had convulsions a week or two before coming into the workhouse, and he had further ascertained that it was not uncommon for her to eat sausages. The hydatid sac, he had no doubt, was composed of the egg of the tapeworm, the worm having been, doubtless, taken into the body in the process of eating sausages not properly cooked, composed of measled pork. The eggs of the worm thus taken into the body found their way into the various organs, the liver, the head, eyes and brain, and the young worm again forced its way wheresoever it could gain most nourishment. In the present instance, the hydatid sac, pressing upon the brain at the particular point named, caused death. The jury returned a verdict of "Died of disease of the brain."

REVIEWS AND BOOK NOTICES.

A Practical Treatise on Military Surgery. By Frank Hastings Hamilton, M.D., late Surgeon New York State Artillery; Professor of Military Surgery, and Diseases and Accidents incident to Bones in the Bellevue Medical College; Surgeon to Bellevue Hospital, etc. New York: Bailliere Brothers, 1861, p. 232. Price.

The peaceful career of the republic for a long period has caused but little attention to be given to military matters. The policy of the nation has been one of peace, and an unparalelled course of prosperity has been its reward. Yet this material prosperity, under the influence of a liberal government, seemed not to be appreciated by a portion of our citizens. The great struggle and the sacrifices by which the independence of the country was first achieved, has been forgotten by a sectional portion of the community.

The continuance of this happy and prosperous state has been too much taken for granted. While happy at home, and free from entangling alliances abroad, we thought little that the demon of discord could be entertained by any portion of our citizens, and our security be menaced at home. In all this, we have been taught the lesson which other nations have been obliged in sorrow to learn, and can only look forward to a period still very distant, when "swords shall be beaten into ploughshares and

spears into pruning hooks, and nations shall not learn war any more."

While war was unexpected, and while unprepared for war, a short period has shown how great are our resources for rapidly raising men, money, and materials for its vigorous prosecution. Within two months, the largest army which ever gathered on the continent has been set in the field. In this short period, the State medical boards have been organized, and a great amount of medical paraphernalia essential to a campaign has been prepared.

The medical profession in this country have given little attention to military surgery. The medical records of the war of independence, and that of 1812, were few, and of little value. The war with Mexico was not of a very gigantic character, and it has not left much impress in a surgical way. The traumatic surgery, too, of some of the most modern implements of war, is practically unknown to us.

The production of this excellent work on military surgery, in anticipation of the present war, before the first battle had been fought, is one of the evidences of the national and loyal military spirit. The author is a thoroughly practical surgeon, and already distinguished as a writer. His work on fractures and dislocations is one of the classics of surgical literature, and the announcement of the authorship of this work is received with a pre-conception in its favor. It is no sensation book, brought out for an ephemeral flourish in these excited times, but one which was really needed, and which will serve as a basis for further literature of the kind that the present war will develop.

The introduction, showing the status of military surgeons and military surgery, is exceedingly interesting. The remarks on the examination of recruits are full and judicious. Such instruction should be disseminated among all the volunteer surgeons. The officers of regiments have already been frequently annoyed by the number of men who have been enlisted, and who now encumber the hospitals, or are seeking a discharge on account of physical incapacity. The general hygiene of troops, the greatest responsibility of the army surgeon, forms an important chapter. The accommodation of troops in barracks, tents, etc., is given due consideration. The hygiene of military hospitals, which have almost universally been pest-houses, and which have been by experienced military authority called the "graves of the army," is considered in an impressive chapter. The directions for necessary preparations for the field are given in detail. The hygienic management of troops on the march, and the means of conveyance of sick and wounded soldiers, are matters about which our volunteer surgeons will be inexperienced, and for humanity's sake, we advise them to give attention to the chapters on these subjects.

The chapter on gunshot wounds is full, but it is evidently a subject on which the author, like most other American surgeons, has not had much experience. He remarks oddly, that the missiles which produce gunshot wounds are "projected by the *elastic* power of gunpowder." The assertion that smooth round balls, especially when the speed of their progress has been considerably arrested, revolve constantly upon the axis is certainly an error. This revolution on the axis of projection is peculiar to the rifle ball, and really decreases as its force becomes nearly spent. The deflection of balls from a straight line after having entered the body, the author attributes to this rotary motion of the ball on its axis, whereas the very object and influence of the rotation is to prevent deviation from the line of flight. Projectiles from smooth bored barrels, which do not revolve, are much more liable to glance off than the rifle ball.

The Munchausen-like stories of balls making the circuit of the body and then escaping, are repeated. Among these is the case related by Hennen, in which "a ball struck the pomum adami and was found lying in the orifice of entrance, having gone completely around the neck." We would as readily believe that a man could be shot in the mouth, and that the ball after traversing the course of the alimentary canal escaped and rebounded again into the mouth. Some experiments of gunshot wounds on the cadaver, made a number of years ago, using for the purpose a large pistol, illustrated to us the frequent deviation of balls from the line of projection, but no instance, whether thrown with full force or nearly spent, was the deviation of the ball very great, and certainly never so great as to partially *return*, as it is sometimes said to, on its course.

The remarks on the treatment of wounds are judicious. On the subject of wounds of the bladder, a drainage of urine by the catheter is insisted on. The propriety of sometimes speedily accomplishing a very thorough drainage by perineal incision, is not alluded to. The observations of Larrey and others show that wounds of the bladder, even when its peritoneal covering is involved, are not always attended with an extravasation of urine. The tissues close around the wound in the coats of the organ so that extravasation may not take place, and if very free drainage be kept up, no subsequent extravasation will occur.

The rules on the subject of amputation are fully up with modern conservative practice, and the same may be said of the advice relative to the treatment of wounds of joints.

Dr. Hamilton advises the use of anæsthetics, preferring ether to chloroform, on account of its safety and its less liability, as he believes, to prevent union of wounds.

The chapters on hospital gangrene, dysentery, and scurvy, are of great practical value, and should concern the military surgeon as much as the more attractive subjects of traumatic surgery.

Summary of Medical Science. Edited by Walter S. Wells, M.D. Part. 1. Charles T. Evans, 532 Broadway, N. Y. April, 1861. $2 per annum, in advance.

The object of this work is to present to the profession a semi-annual digest of the essentially practical articles embraced in the principal European and American Medical Journals, together with contributions from eminent Surgeons and Physicians. The attempt to make an intelligent abstract, properly conveying the idea entertained by the author, is always a difficult one, but in the volume before us the editor has shown conclusively his ability in that direction. We regret that he should have confined himself so exclusively to European journals, and trust that in his next number he will give equal prominence to the many important contributions to medical science which are constantly issuing from the American press. By so doing his "summary" will commend itself as invaluable to the profession.

A Treatise on the Practice of Medicine. By Edwin R. Maxson, M.D., formerly Lecturer on the Institutes and Practice of Medicine in the Geneva Medical College. Pp. 705. Philadelphia: Lindsay & Blakiston. 1861. Price $4,00.

In these perilous times it seems almost an act of fool-hardiness to issue a new book from the press, and the book itself must have some rare excellencies, and be uncommonly meritorious, in order to meet with that favor with which authors delight to have their labors received. Yet here we have a new work upon the practice of medicine, hardly claiming to throw any new light upon medical science or practice, but rather to concentrate that which already exists, and to present in a clear, concise, intelligible form, the human system in health as the standard; then the deviations for that standard in disease; the symptoms, diagnosis, nature, anatomical characters, causes, pathology and prognosis of each peculiar morbid condition, and finally the indications of treatment derived from these pathological conditions. The author evidently intended his work to be practical rather than purely scientifical; to be the companion of the busy practitioner who has but little time to devote to study, and desires results, rather than the long and tedious processes by which they are sometimes reached, and who regards more what is new and suggestive in the application of remedies, than speculations in pathology, or the causes which produce disease. Regarding it in this light Dr. Maxson's work is timely and appropriate, and will no doubt be hailed with delight by the large number of practitioners whose necessities, as to time and economy, compel them to discard more elaborate works. In its arrangement it varies little from that of the standard works; in style it lacks the polish which the "several years" of its incubation ought to have given it, and yet the directness and independence with which the author advances his views, without stopping to say or inquire whether they agree or disagree with his cotemporaries, is a feature of the work which will commend itself favorably.

THE MEDICAL AND SURGICAL REPORTER.

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PHILADELPHIA, SATURDAY, JULY 20, 1861.

MEDICAL LOCOMOTION.

The customs of physicians, as to their means of locomotion in their daily professional tours, have varied through different ages as much as some professional opinions. Like some professional theories, too, they have gone through their cycle and again returned to favor. It may be supposed that doctors, in the earliest ages, were peripatetic in their habits, and within the last few years, in this city at least, the profession seems to be again reverting to the habit of journeying much on foot. But with the frequent dispensing with carriages has appeared an innovation which has, to some extent, taken their place, and, between which and walking at intervals, the practitioner is enabled to make his daily visits.

There is no class of persons by whom our system of city railways is more appreciated for the comfort and convenience rendered, than the medical profession. All points of the city are accessible by railway cars, and the intersection at the street crossings of lines running at right angles through the entire length of the city, enables the practitioner to follow his devious way without much toil or loss of time. This method of progression has had a great influence, not only in alleviating the toils of medical peripatetics among those who have habitually walked, but in discontinuing, to a great extent, the practice of riding in carriages. A very large number of physicians in active practice now accomplish their rounds between the easy alternation of walking and car-riding.

In resuming the practice of walking, the profession is reverting to the custom of a distant time. The practice of carrying a cane,

which, when mounted with a golden head, became a professional badge, originated probably in the general habit of walking by city physicians.

In rural practice, doctors in early times, from necessity, rode on horseback, and for a long period, previously to the reign of Charles II., it was the custom of physicians in London to ride on horseback, sitting sideways on the saddle, after the manner of ladies. The illustrious Harvey is pictured as "riding on horseback, with a foot-cloth, to visit his patients; his man following on foot, as the fashion then was, was very decent, now quite discontinued." But, previously to that period, in the year 1563, Dr. Langton, it is said, "rid in a car with a gown of damask, lined with velvet, and a coat of velvet, and a cap of the same." At a later period, the last century, Jenner is pictured as riding on horseback, "dressed in a blue coat and yellow buttons, buckskins, well-polished jockey boots, with handsome silver spurs, and a smart whip with a silver handle."

From the following account which the great Sydenham gives of his own professional habits, about the year 1670, it is evident that he was much given to riding in his carriage, using it twice a day: "In the morning, when I rise, I drink a dish or two of tea, and then ride in my coach till noon; when I return I refresh myself with any sort of meat, of easy digestion, that I like; I drink somewhat more than a pint of Canary wine immediately after dinner every day, to promote the digestion of food in my stomach, and drive the gout from my bowels. When I have dined, I betake myself to my coach again, and, when my business will permit, I ride into the country two or three miles for good air. A draught of small beer is to me instead of a supper, and I take another draught when I am in bed and about to compose myself to sleep."

The pomp and circumstance of the doctor of those times is quaintly told by Washington Irving, in one of his most graphic pictures. The consequential air of the doctor of the "good" (?) "old times," contrasts strongly with the more unassuming habits of the practitioner of "these degenerate" (?) "days." Irving thus starts off the doctor, with bustle and parade, from his own door:—"His wall-eyed horse stood stamping and whisking off the flies, for full an hour before the house; then the doctor's saddle-bags would be brought out and adjusted; then, after a little while, his cloak would be rolled up and strapped to the saddle; his umbrella would be buckled to the cloak; while, in the mean time, a group of ragged boys, that observant class of beings, would gather before the door. At length, the doctor would issue forth, in a pair of jack-boots that reached above his knees, and a cocked hat, flapped down in front. As he was a short, fat man, he took some time to mount into the saddle, and, when there, he took some time to have the saddle and stirrups properly adjusted, enjoying the wonder of the urchin crowd."

For half a century the gig or "chair" was the favorite professional vehicle, and yellow was the favorite color. Fifty years ago, this simple form of carriage was in almost universal use by the profession in this city. Dr. Rush is alluded to by his biographer, Dr. Jackson, as "riding in a plain vehicle, with two wheels and one horse. In this open carriage we saw him facing the storms the last winter of his life." After the "one-horse shay" had for years almost disappeared from our streets, it has been somewhat recently revived, and is again in favor.

We are, thus far, more favored in Philadelphia with city railways than any other city; almost all streets which traverse the city having railway tracks in them. The level nature of the surface, on which the city is built, much facilitates the running of railway cars, and the vast extent of the ground covered renders such rapid and cheap means of conveyance indispensible to the necessities and convenience of the masses. The passenger railways has become a characteristic of Philadelphia. There are about two hundred miles of railway track within the city.

The subject of a yearly commutation ticket, to be issued to physicians, which would pass its holder over all of the railway lines, was, two years ago, agitated, but failed for want of interest in the matter. Since that time, the railways have vastly increased in number and extent, and the subject is now worthy of an earnest reconsideration.

EDITORIAL NOTES AND COMMENTS.

The *Dental Register of the West* is discussing the importance of the appointment of Dentists for the army. It believes "that the teeth of those in our armies should receive more attention than heretofore. By neglect they may frequently become diseased, and that at an early period of camp life." The *Register* is "fully convinced" that the services of good, efficient dentists are needed in the army. The great difficulty will be to convince the authorities that they are needed, and ere that is accomplished, we fear that the war will be entirely over, and the soldiers all dispersed among their kindred, where the enterprising dentist will find "subjects" without encountering the dangers and privations of camp life.

The *Journal of the Franklin Institute* gives some statistics of the meteorology of Philadelphia for the month of May, which are interesting and deserve a place in our columns. The mean temperature of the month was 59.38°, nearly 5° low that of May last year. The highest range of the thermometer was 83° on the 27th. The 26th was the warmest day, its mean temperature being 73.7°. The coldest day was the 3d, 40°; the lowest, 36°, was reached on the 2d.

The amount of rain which fell during the month was 6,240 in. The atmospheric pressure was greatest (30,132 in.) on the morning of the 31st, and least (29,096 in.) on the afternoon of the 27th; the average range for the month was 0.156 of an inch. The spring just closed was the coldest of the last three. The last ice of the season was found on the 22d of March, and the last snow fell April 17.

The Sanitary Committee are pursuing their labors with vigor, and they find that the numerous complaints which reached the public ear, through the volunteers, in regard to their rations, have a real existence, and that they are in some instances nearly insufferable. The sick are yet worse off. The only additional rations issued to them from the medical department are "tea, white sugar, tamarinds, spices, arrow root, sago, corn starch, and liquors;" and these are the only rations allowed or provided for by the government in the hospital. The Sanitary Committee urge the addition of "dissected hash, soup made of beef and vegetables, such as is used in the Arctic Expeditious, dried tomatoes and apples, concentrated milk put up in sealed cans, (that preserved in sugar, and of the consistency of syrup, being preferable to other kinds,) preserved eggs and fruits, chocolate, and portable egg-nogg." These delicacies, so important in certain cases of disease, or to sustain nature, sinking under suppurating wounds, the volunteer soldier is compelled to look to his friends at home to furnish. No provision is made, or can be made by government under the present military code, to supply them. Hence, one reason why the commission ask for donations and subscriptions from the benevolent, and hence the urgency with which they make their appeal for contribution of these articles to the *hospital* department. At their late meeting at Washington the leading questions discussed and acted on, were:

1st. The payment of soldiers' wages by allotments, or by treasury orders, for the benefit of their families and themselves. 2d. The condition and wants of the army in and near Washington; and a like report from the encampments at Fortress Monroe, and a similar report from the Western encampments, visited by the President. 3d. Measures for improving the camp police and regimental hygiene. 4th. Special reports from various inspecting agents of the Commission. 5th. Improvement in the soldiers' rations and regimental censure. 6th. The diminution or prevention of intemperance in the army. 7th. The establishment of competent cooks in every regiment. 8th. Nursing and the better care of the sick and wounded. An abstract of the several reports were ordered to be published in document form. They are in press and will soon be furnished to the public.

A concise manual of advice to military officers, respecting camp police, and military hygiene is to be published immediately. A depot has been opened for the reception and distribution of clothing and delicacies for the sick volunteers, and the committee express their determination to follow up their enquiries with such efforts as may be necessary to secure an effectual reformation of the defects and evils with which they meet.

An Academy of Medicine was instituted at St. Paul, Minnesota, in March, 1860, and is now in possession of two spacious rooms, suitably furnished and well lighted with gas; has a superior microscope, an analytical chemical apparatus, and an electrical machine. A medical library has also been commenced. The cash receipts of the first year were $620.72; expenditures, $462.93; leaving $367.00 in the Treasury. The Academy has adopted the Code of Ethics of the American Medical Association. Dr. Wharton is the Secretary.

Correspondence.

The Weather—The Departure of the Second Regiment for the War—Meeting of the Obstetrical Society—Interesting Cases reported by Dr. Cotting and Dr. Walter Channing—A New Anæsthetic—The New Hospital—Dr. Martin and Fortress Monroe.

BOSTON, July 11, 1861.

The weather, for the week past, has been truly worthy of being called the "heated term." It has had its effect, physically, upon our citizens, driving those who had not already found a place of sojourn by the sea-side, pell mell, to cooler localities than could be found in city houses. To-day we feel the effect of yesterday's shower in a slight degree; but the state of the atmosphere is very suggestive of the dog-days to come. The sensation of the week has been the departure of the Second Regiment, Col. Gordon, for the seat of hostilities. No regiment has left the State in so complete condition for efficiency in every department; and, in this connection, I may say, without invidious criticism, that, under the care of the surgeon, Dr. L. M. Sargent, Jr., the men are sure to be well attended under all circumstances. Dr. Sargent carries with him the respect and esteem of the whole profession, and their cordial good wishes for his success and safe return.

The meeting of the Obstetrical Society was held on July 6th. A number of papers were read. Dr. Cotting reported a case of vesico-vaginal fistula spontaneously cured. In alluding to the features of the case, he took occasion to recall the cases which he had seen under the charge of Dr. George Hayward, of this city, and gave a short account of Dr. H.'s method of operating. So much has been put forth by subsequent operators and writers upon this subject, that a fair share of the honor of the operation has hardly been rendered Dr. H. If we compare the relative condition of the knowledge of the profession with regard to such operations then and now, we shall be better able to appreciate the originality of Dr. Hayward's steps in operating. The paper is published in the *Boston Medical and Surgical Journal*, and may be read with interest by all. It certainly seems proper and right that the claims of a member of the profession, who has contributed so much to add to its dignity and increase its usefulness, as has Dr. Hayward, should be recognized and cheerfully accorded.

A case was mentioned by the president, (Dr. Walter Channing,) which he saw in consultation, where the slough came away covered, as in the case of a foreign body in the bladder, with a thick, calcareous coating. A paper was also read by the president on "concealed, accidental, uterine hemorrhage near the close of pregnancy." The prominent facts were, first, the exceedingly small number of cases which were to be found on record or could be sought out; second, the occurrence of the accident at the end of pregnancy only; third, the cases reported afforded no evidence whether it is better, when this accident is suspected, to proceed to deliver, or let the case go on naturally. None of the members of the Society present had seen a case which they were certain was of this nature. One gentleman had been called to two, in which the symptoms were such as to lead to a belief that they were cases of concealed hemorrhage; but no post mortem was permitted, and it was only a matter of conjecture. Quite an interesting discussion took place relative to the frequency of albumen in the urine of pregnant women, and its connection with an edematous condition of the surface. The cases reported, in which the urine had been tested, showed that there may be albumen in the urine without anasarca, and vice versa. In some of the cases it suddenly made its appearance some days after delivery. Dr. Cotting reported a case in which there were repeated and severe convulsions, with the usual bloated and edematous condition for some time previously. This case did perfectly well. The labor was quite short in duration, and natural; the only treatment followed was gentle purges of castor-oil. On the fourth day, no albumen was to be found in the urine; and by the sixth her condition was comfortable. There had been no opportunity of testing the urine before labor.

A new anæsthetic has been brought to the notice of the profession. For the present, it is called Kerosoline, and it is found in the distillation of the Kerosine oil, from the Albert coal. It comes among the first products of the distillation, and in quite large quantities. It is not unpleasant either in taste or smell, and is effective and speedy enough in its operation. Prof. H. J. Bigelow has been testing its value for anæsthetic purposes; and at the last meeting of the Medical Improvement Society it was exhibited. If it proves to unite the speedy and complete effect of chloroform with harmlessness in exhibiting it, it will be a welcome addition to our list.

Since my last letter, I have received more perfect information in relation to our new hospital, which enables me to modify my remark as to the cost of the structure. It is proposed, at first, to build the isolated pavilions, thus incurring an expense of about $20,000 only for each, and on their completion, when all the adjacent buildings are occupied, then to put up the centre, which finishes the whole, and completes it both architecturally and for the purposes of the hospital. I am the more desirous to make this modification, as I should regret, deeply, if I should seem to have thrown doubt upon an enterprise which, for so long a time delayed, at last appears to bid fair to be commenced. An article has been going the rounds of the papers in relation to the employment of Dr. Martin,

of our neighboring city of Roxbury, in the vaccination and care of the troops at Fortress Monroe, so far as they may be affected with variola. In justice to the medical staff of the State, who have had the supervision of this matter, it should be said that the troops from Massachusetts at Fortress Monroe, were sent at a moment's warning, and with only the preparation that the emergency of the case allowed. There was no time for vaccination or anything of the sort, and being mostly from the country, where vaccination is not looked after so sharply as in the city, there were, doubtless, numbers who had never been protected from small-pox. But, since then, this matter has been most carefully and thoroughly attended to, and every necessary step taken to insure all the protection that medical aid can give. This should be said in simple justice to the gentlemen who have had the matter in charge, and who have been blamed for carelessness in a matter in which, in reality, they have been most careful and pains-taking.

Trimount.

NEWS AND MISCELLANY.

Dr. Edwin M. Snow, City Registrar, of Providence, R. I., sends us the necrological register of that city for June. Total number of deaths during the month, 69; of which, from consumption, 14, pneumonia, 5. Fourteen were under one year of age, and 11 between 30 and 40.

Mr. Joseph Laidley met with a violent death a few days since at Richmond, Virginia. He was a distinguished Chemist and Pharmaceutist, and was at the time of his death making some experiments with detonating materials, with a view to supply the deficiency of the southern army in percussion caps, we believe. He was well known in this city, having been educated here.

We notice the death of A. B. Sands, of the firm of A. B. & D. Sands, of New York city, long and favorably known as Druggists and Pharmaceutists.

Dr. Frorriep, well known as Professor at Jena and Berlin, and a large contributor to medical periodical literature has just died at Weimar, of apoplexy.

Dr. Bouteille, Sanitary Commissioner to the Egyptian Government at Suez, died suddenly at short time ago. He was held in so high estimation that the Europeans of Suez have had a tombstone erected to his memory.

The Dublin Medical Press announces the death of Dr. Kingsley, of Roscrea, Ireland, and says "one of the worthiest of the worthy has passed from among us, and the medical men of Ireland have sustained a loss not easily to be repaired." He was distinguished for his activity and zeal in everything relating to the honor and welfare of his profession, and was the beneficent founder of the Royal Medical Benevolent Fund Society of Ireland.

Dr. Riggs of Cortland County, N. Y., was lately tried before the Supreme Court, for alleged malpractice. The suit was brought by Ansel Grinnel, a wealthy farmer of Onondaga County, claiming damages to the amount of $5,000, on account of a false joint following the treatment of a fractured arm. The trial began on Monday morning, and closed late Thursday afternoon, when the jury gave a verdict of "no cause of action." The verdict gave great satisfaction to the Dr.'s numerous friends.

Dr. Rodet, late Chief Surgeon of the Antiquaille, at Lyons, France, recommends the solution of the perchloride of iron as a *specific* for the virus of hydrophobia, if applied within two hours from the infliction of the bite. It destroys the virus, as he has determined from actual experiment.

Dr. J. F. White, of Cincinnati, Ohio, has been appointed Surgeon in one of the Kentucky regiments.

Dr. Frederick Robie, of Fordham, Me., has been appointed a Paymaster in the regular Army of the United States.

At the regular meeting of the Guardians of the Poor for this city, on Monday last, Dr. T. Sturdivant was elected Out-door Physician in the First Poor District, and the old Medical Board was re-elected. The agent reported the census of the Alms-house for the week ending July 13, at 2,734, an increase of 521 over the same week last year.

The total number of deaths in New York city, for the week ending July 13, was 565, an increase of 172 over the week previous, and 123 over the corresponding week last year. The bulk of the mortality was among children, numbering 399. The total number of deaths in Philadelphia for the same time was 406; adults 108, children 298.

English Census.—The European correspondent of the *Presbyterian Banner* gives some interesting items of the English census, which may not be uninteresting to our readers. He says:

"The agricultural towns are, for the most part, stunted and decaying, the manufacturing population is increasing, and the agricultural diminishing. Cambridgeshire loses 3,500 in this way, and Lancashire has gained, besides its own natural increase an immigration of 143,313 persons. The population of London is now 2,803,034; ten years ago it was 2,362,236, exhibiting an increase of 440,798; the greater portion of which is due to natural increase; the proportion of it represented by immigration being only 164,591, against 273,177 excess of births over deaths. The healthiness of London is thus apparent. This arises partly from im-

proved drainage, and partly from the fact that the central districts of the metropolis have steadily become more and more places of business, and less and less places of residence. Of provincial cities and towns, Liverpool is foremost, the population being 443,871, as against 375,445 ten years ago. Next stands Manchester, with 357,694; then Leeds, 207,153; then Sheffield, 185,107; Bristol, 154,073. "This census has a strong political suggestiveness. Numbers, wealth, and intellectual activity, must more and more govern the country, and the tables show what changes are to be made in the distribution of representation, in order to correspond with the distribution of those three great elements of power."

Dr. D. W. Maull, of Georgetown, Del., has received the appointment of Captain in Company G., 1st Regiment Delaware Volunteers, now stationed at Perryville, Md.

The Ladies of Philadelphia are most assuredly deserving of great credit for their active exertions in furnishing necessary articles for the comfort and protection of the volunteers in the army. The remark sometimes made, that if you want any enterprise accomplished enlist the ladies in it, has in this case proved eminently true.

We find the result of their beneficient exertions to July 1st in one of the daily papers, which we copy:

"To the Military Hospital in Moyamensing the Association has furnished 25 iron bedsteads, 30 mattrasses, 150 pillows, 152 sheets, 252 pillow cases, 500 towels, 50 pairs of blankets, 50 bed-spreads, 136 hospital shirts, 6 bleached muslin shirts, 7 red flannel shirts, 16 wrappers, cooking utensils, baskets, tubs, brushes, chairs, castile soap, &c., besides $325 50 in money, a donation from the First Presbyterian Church.

To the Military Hospital at Chambersburg, under the care of Doctor Throop, since removed to Hagerstown, the Society has furnished 80 sheets, 70 pairs drawers, 50 hospital shirts, 4 double wrappers, 30 bed-spreads, 50 pillow cases, 12 pairs of slippers, 17 pairs of stockings, 36 towels, 6 sick-cups, a package of dietetic articles, a box of lint and bandages, and a bundle of half-worn clothing.

To the hospital at Camp Curtin, near Harrisburg, they have furnished 27 shirts and 6 sick-cups.

To Camp Washington, near Easton, they have sent 27 shirts and 6 sick-cups.

To soldiers mustered into service, they have supplied 4146 flannel shirts, grey and red; 911 pairs drawers, 454 flannel bands, 2,000 havelocks, 48 pairs stockings, 36 pocket handkerchies, a lot of castile soap, 150 towels, 5,000 bags, each containing a pin-cushion, needles, buttons and thread; 300 combs, 4,000 copies *Sunday School Times*, and over 50,000 pages of tracts and religious books, besides three small libraries to companies.

From the proceedings of the Senate on Wednesday, we observe that a bill has been introduced into the Senate to increase the medical corps of the navy. We hope that the bill will pass.

Clifton Hall Asylum for the Insane.—At a meeting of several members of the medical profession of Philadelphia, held, by invitation, on Saturday, 13th inst., at Clifton Hall, the private Asylum instituted and superintended by Dr. Given, they were so much pleased with the ample and convenient arrangements, and the attractive and healthful location, that they determined to give a formal expression to their sense of the great value of the undertaking of Dr. Given, and of the gratifying success which has, thus far, attended his management in establishing and conducting it.

Dr. John B. Biddle, having been called to the chair, and Dr. E. Hartshorne appointed secretary, the following preamble and resolutions were unanimously adopted, and ordered to be printed in such a manner as might be deemed best:—

Whereas, we, in common with many of our medical associates, are fully convinced of the importance of a private establishment for the treatment of mental disorders, and have long felt the want in our city of just such a one as we here see around us.

Resolved, That we have watched the progress of Dr. Given's enterprise with very great interest, and now take much pleasure in congratulating him and the whole community upon its successful inauguration and promising condition, as evinced by the appearance of the house and grounds, and by the favorable results of the last year's operations, exhibited in the Annual Report.

Resolved, That in expressing our unqualified approval of properly conducted private asylums, we are gratified to be able to recommend Clifton Hall, as combining all the requisites for the safe and efficient treatment of patients suffering from mental disorders, and therefore commending itself to the attention and active interest of the medical profession.

Resolved, That we tender our cordial thanks to Dr. Given for the handsome manner in which he has enabled us to become acquainted, by personal observation, with the material advantages of Clifton Hall as a desirable retreat for the insane, as well as for the social opportunity which he has so pleasantly afforded us of uniting in a tribute to the intelligent philanthopy, which is evidently the ruling spirit of his excellent establishment.

Parsees for Army Surgeons.—The Parsees resident in London, Liverpool, and Manchester, have petitioned the House of Commons of England, against the exclusion of any of their number, by reason of race or creed, from officiating as army surgeons, provided they are qualified to discharge the duties. The testimony of Dr. Walshe, Mr. D. O. Edwards, Drs. Jenner,

Garod, Harley, and Williamson, of Manchester, is in favor of their capacity to serve in any climate, and the *Times and Gazette* suggests that the opposition to the Parsees as surgeons, is "an indication of the feeling which we English denounce when exhibited by the Anglo-Americans towards the Africans."

Mr. Jas. M. Sanderson, of the New York Hotel, is appointed superintendent of the culinary department of the army, under the direction of the sanitary commissariat.

National Dental Hospital.—A hospital to provide gratuitous and efficient aid to the poor in diseases of the teeth, and to include means of instruction to students preparing for dental practice as members of the College of Dentists, has just been established at London, England. It is not designed to interfere with the one already in existence, which is metropolitan merely; but to receive subscriptions and patients from all parts of the world.

Amid the abundance of hospitals, public and private, with which Philadelphia abounds, we marvel that there is no Dental Hospital.

At the July commencement of the University of Pennsylvania, the degree of Doctor of Medicine was conferred on R. R. Murphy and Henry Essig.

A Healthy City.—Dr. Thomas M. Logan, of Sacramento, Cal., sends us the monthly Meteorological and Necrological Report of that city, for May, 1861. The average range of the thermometer for the month was 27 degrees, the highest 77, the lowest 50. The number of deaths during the month was 22, of which eight were of consumption. Only two were under 10 years of age, and only one over 60. The average of deaths in May, is precisely the average of the last eleven years. The report says the health of the city is fully as good as usual at the present time.

Medical Hospital at Richmond, Va.—This hospital is just now completed at an expense of $20,000, and is open for the reception of patients. It is provided with every convenience necessary for the comfort and successful treatment of the sick, who are all under the immediate care of the Professors of the Medical College. Attending Surgeons, Drs. Gibson, Peticolas, and Wellford. Attending Physicians, Drs. Tucker, Conway, and McCaw. Resident Physician, Dr. Isaiah H. White.

The following statement, from the Cairo *Camp Register*, shows the amount of sickness at that place to be quite large. Since the 27th of April, 772 soldiers have entered the army hospital, and have been treated for the following diseases, viz:—Diarrhœa, 103; bilious fever, 27; rheumatism, 7; pneumonia, 9; fever and ague, 19; dysentery, 115; gun-shot wounds, 3; pleuro-pneumonia, 11; intermittent fever, 17; miscellaneous, 461.

Egypt as a Hygienic Resort.—A volume just issued of Medical Observations on the Climate of Egypt, the *Medical Times and Gazette* says, recommends a visit to the Nile in phthisis, bronchitis, asthma, and renal disorders, as the early stage of Bright's disease.

The use of living animals for physiological experiments and practice in operations at the Veterinary Schools in Paris, France, has been prohibited by an order issued by the Minister of Agriculture and Commerce.

Answers to Correspondents.

Drs. S. S. & R. S. W., Pa.—Propylamine is obtained by distillation with caustic potash, from various sources. For medical purposes it is better to employ herring pickle in its preparation. The chloride is the most desirable form for its administration. The following is the formula used:

R.—Propylamine Chloridi, - - - -	gr. xxxvi.
Sacchari Pulv., - - - - - -	drachm ij.
Aq. Menthæ Pip., - - - - -	f. oz. vj. M.
ft. solutio.	

S. Dose.—A tablespoonful every two hours.

Each tablespoonful represents three grains of the chloride. It is handsomely put up in 6 oz. bottles, and sold at $7 per doz., or in crystals at $7 per ounce.

Dr. C. L. S., Wisconsin.—We should be pleased to receive the account of the case you mention.

☞ It is not often we indulge in poetry, but the following *morceau* has such "irrepressible" claims to our notice that we publish it:

MEDICAL HIGHWAYMEN.

Some late advertisers of patented pills,
By way of pursuading the public to try,
Bid all who are cursed with corporeal ills,
To "take them and *live*, or refuse them and *die!*"

God help us!—says Timon—and must we defend
Our persons and pockets with pistol or knife?
One can easily see what the rascals intend
'Tis the highwayman's cry, "your purse or your life!"

Errata.—In our last number, page 340, fourth line from top of first column, read "not" instead of "rather." "Its importance is *not* overrated."

☞ We have on hand a quantity of pure Vaccine Virus, which we furnish to subscribers to the Reporter *gratis*, on the receipt of a sufficient amount of stamps to prepay the postage, on one condition only, namely, that they return us, at least, as much pure matter as we send them. To those who are not subscribers we will furnish the virus at the usual rates.

Communications Received.

Connecticut—Dr. S. L. Chase, Dr. O. S. Hickok, Dr. O. P. Lyman, Dr. A. J. Douglas, Dr. S. Parmela. *Kentucky*—Dr. C. S. Abell. *Massachusetts*—"Trimount," Dr. Ch. Cullis, Dr. C. Burnett Smith. *Maryland*—Dr. S. M. Harvy, with encl.; Dr. D. W. Maul. *New Hampshire*—H. B. Cross. *New Jersey*—Dr. J. B. Irwin. *New York*—Dr. Louis Bauer, (2); Dr. John Swinburne; Dr. J. A. Monell, with encl. Dr. W. Patrick; *Ohio*—Dr. N. B. Tyler, with encl.; Dr. J. F. White, Dr. L. Barnes, Dr. Edward Hottenstein, Dr. E. Baltz. *Pennsylvania*—Dr. Hiram Nichols, Dr. C. P. Herrington, Drs. S. S. & R. S. Wallace, Dr. J. B. Longshore; Dr. D. Merritt, Dr. J. P. Engleman, with encl.; Dr. A. M. Heistand, with encl. *Rhode Island*—Dr. S. W. Francis, Dr. W. B. Hopkins. *Wisconsin*—Dr. C. L. Stoddard.

Office Payments—Per Mr. Swaine: Drs. Sproul, Walton, Kinkelin.